<u>AMENDMENTS TO THE CLAIMS</u>

Claims 1-21. (canceled).

22.     (New) A process for reducing emissions operating a yellow flame burner, the process comprising:

feeding to a yellow flame burner adapted to burn petroleum derived gas oil

one or more liquid Fischer-Tropsch product comprising iso-paraffins and normal paraffins, the one or more liquid Fischer-Tropsch

product having a density of between 0.65 and 0.8 g/cm$^3$ at 15 °C;

burning the one or more liquid Fischer-Tropsch product using the yellow

flame burner under conditions comprising a value of lambda of from about 1 to about 2 producing improved flue gas comprising less carbon monoxide and less $NO_x$ than flue gas produced burning only petroleum derived gas oil; and,

performing one or more procedure selected from the group consisting of

heating water by indirect heat exchange with the improved flue gas in one or more boiler and heating space directly with the improved flue gas.

23.     (New) The process of claim 22 wherein the procedure is heating water with the improved flue gas by indirect heat exchange in a boiler.

24.     (New) The process of claim 22 wherein the procedure is directly heating a space with the improved flue gas.

25.     (New) The process of claim 22 wherein the one or more liquid Fischer-Tropsch product is Fischer Tropsch gas oil.

26.     (New) The process of claim 22 wherein the one or more liquid Fischer-Tropsch product is Fischer Tropsch kerosene.

27.     (New) The process of claim 22 further comprising producing less hydrocarbon emissions at the start of burner running than when using only petroleum derived gas oil as the fuel.

28.     (New) The process of claim 22 wherein the conditions otherwise are the same as operating conditions used to burn petroleum derived gas oil.

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29.     (New) A process for reducing emissions operating a yellow flame burner, the process comprising:

feeding to a yellow flame burner adapted to burn petroleum derived gas oil a blend comprising one or more liquid Fischer-Tropsch product comprising iso-paraffins and normal paraffins, the one or more liquid Fischer-Tropsch product having a density of between 0.65 and 0.8 $g/cm^3$ at 15 °C;

burning the one or more liquid Fischer-Tropsch product using the yellow flame burner under conditions comprising a value of lambda of from about 1 to about 2 producing improved flue gas comprising less carbon monoxide and less $NO_x$ than flue gas produced burning only petroleum derived gas oil; and,

performing one or more procedure selected from the group consisting of heating water by indirect heat exchange with the improved flue gas in one or more boiler and heating space directly with the improved flue gas.

30.     (New) The process of claim 29 wherein the blend comprises about 40 wt.% or more of the one or more liquid Fischer Tropsch product.

31.     (New) The process of claim 29 wherein the blend comprises about 80 wt.% or more of the one or more liquid Fischer Tropsch product.

32.     (New) The process of claim 29 wherein the procedure is heating water with the improved flue gas by indirect heat exchange in a boiler.

33.     (New) The process of claim 29 wherein the procedure is directly heating a space with the improved flue gas.

34.     (New) The process of claim 29 further comprising producing less hydrocarbon emissions at the start of burner running than when burning only petroleum derived gas oil.

35.     (New) The process of claim 29 wherein the conditions otherwise are the same as operating conditions used to burn petroleum derived gas oil.

36.     (New) The process of claim 29 further comprising detecting the flame using a blue flame detector.

37.     (New) A process for reducing emissions operating a yellow flame burner, the process comprising:

> feeding to a yellow flame burner adapted to burn petroleum derived gas oil
>> one or more liquid Fischer-Tropsch product comprising iso-paraffins and normal paraffins, the one or more liquid Fischer Tropsch product having a density of between 0.65 and 0.8 $g/cm^3$ at 15 °C;

> burning the one or more liquid Fischer-Tropsch product using the yellow
>> flame burner under conditions comprising a value of lambda of from about 1 to about 2 producing a flame and improved flue gas comprising less carbon monoxide and less $NO_x$ than flue gas produced burning only petroleum derived gas oil; and,

> performing one or more procedure selected from the group consisting of
>> heating water by indirect heat exchange with the improved flue gas in one or more boiler and heating space directly with the improved flue gas; and,

> detecting the flame using a blue flame detector.

38.     (New) The process of claim 37 wherein the conditions otherwise are the same as operating conditions used to burn petroleum derived gas oil.

39.     (New) A process for reducing emissions operating a yellow flame burner, the process comprising:

> feeding to a yellow flame burner adapted to burn petroleum derived gas oil
>> one or more liquid Fischer-Tropsch product comprising iso-paraffins and normal paraffins and having a density of between 0.65 and 0.8 $g/cm^3$ at 15 °C, the one or more liquid Fischer-Tropsch product being selected from the group consisting of Fischer-Tropsch kerosene and Fischer Tropsch gas oil;

> burning the one or more liquid Fischer-Tropsch product using the yellow
>> flame burner under conditions comprising a value of lambda of from about 1.05 to about 1.2 producing improved flue gas comprising 100 mg/kWh or less carbon monoxide and 150 mg/kWh or less $NO_x$ at said value of lambda; and,

performing one or more procedure selected from the group consisting of

        heating water by indirect heat exchange with the improved flue gas

        in one or more boiler and heating space directly with the improved

        flue gas.

40.    (New) The process of claim 39 wherein the conditions further comprise burning the one or more liquid Fischer Tropsch product at a value of lambda of from about 1 to about 1.6 producing improved flue gas having reduced contents of carbon monoxide and $NO_x$ compared to burning only petroleum derived gas oil at the same value of lambda.

41.    (New) The process of claim 39 wherein the conditions further comprise burning the one or more liquid Fischer Tropsch product at a value of lambda of from about 1 to about 2 and producing improved flue gas having reduced contents of carbon monoxide and $NO_x$ compared to burning only petroleum derived gas oil at the same value of lambda.

42.    (New) A process for reducing emissions operating a yellow flame burner, the process comprising:

        feeding to a yellow flame burner adapted to burn petroleum derived gas oil a

            blend comprising one or more liquid Fischer-Tropsch product

            comprising iso-paraffins and normal paraffins, the one or more

            liquid Fischer Tropsch product having a density of between 0.65 and

            0.8 $g/cm^3$ at 15 °C and  being selected from the group consisting of

            Fischer-Tropsch kerosene and Fischer Tropsch gas oil;

        burning the blend using the yellow flame burner under conditions

            comprising a value of lambda of from about 1.05 to about 1.2

            producing improved flue gas comprising 100 mg/kWh or less carbon

            monoxide and 150 mg/kWh or less $NO_x$ at said value of lambda;

            and,

        performing one or more procedure selected from the group consisting of

            heating water by indirect heat exchange with the improved flue gas

            in one or more boiler and heating space directly with the improved

            flue gas.

43.     (New) The process of claim 42 wherein the conditions further comprise burning the blend at a value of lambda of from about 1 to about 1.6 producing improved flue gas having reduced contents of carbon monoxide and $NO_x$ compared to burning only petroleum derived gas oil at the same value of lambda.

44.     (New)  The process of claim 42 wherein the conditions further comprise burning the blend at a value of lambda of from about 1 to about 2 producing improved flue gas having reduced contents of carbon monoxide and $NO_x$ compared to burning only petroleum derived gas oil at the same value of lambda.